



**U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION II**

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**MEMORANDUM**

**TO:** Lorenzo Thantu, RPM

**FROM:** Robert M. Alvey, P.G.

**DATE:** July 19, 2017

**SUBJECT:** Northrop-Grumman/Navy Bethpage  
Nassau County Storm Water Basin 495  
Arthur Street, Bethpage

As a follow-up to the Navy RAB meeting in April, I had an opportunity to conduct an informal reconnaissance walk around the Nassau County storm water basin which is reportedly used as a discharge point of treated water from one of the groundwater treatment facilities associated with the overall Northrop-Grumman/Navy Bethpage environmental cleanup efforts. This is NCDPW Basin #495 located adjacent to Arthur Avenue between Stewart Avenue and Broadway in Bethpage. A few residents had expressed concern at the RAB meeting as to the use of this basin. It is my understanding the NCDPW has issued a Use and Occupancy permit and one aspect is for the permittee to accept maintenance responsibility in exchange for use.

The location is apparently along the right- of -way of the Vanderbilt Parkway constructed in 1906. This was eventually abandoned and the property reverted to Nassau County. From Broadway leading to the west side of the basin, the ground is somewhat elevated, and this was a ramp constructed for a bridge for the former highway. It is also beneath a high- capacity electric transmission line.

The basin itself is set back from Arthur Street on the north side. On the south side, the basin directly abuts the backyards of homeowners. The access gate is currently locked with 4 separate interlocking locks on a security chain. There site fencing has 'no trespassing' signs posted as well as a no littering sign.

Two completed observation wells were observed. These wells appear to be recent and have concrete pads protecting secure flush mounted wells. They appear to be completed in accordance with the current Navy program. One is opposite 75 Arthur Avenue, and the other near the Broadway-Arthur Ave intersection. I'll request the well numbers, logs, and latest sampling results.

The west and east sides bordering the County fence are overgrown with vegetation. The barbed wire and portions of the fencing have significant gaps as are shown on the photographs at the end of this memo. The north side of the basin fence is in good condition with only 1 post bent and no holes observed. The south side appears somewhat a concern as the fence directly abuts residential backyards, and some lots have an additional fence buffering a roughly 8-foot distance with the County fence which limits access for maintenance activities. One home has direct access onto the overall County parcel, with direct access to the basin property as a result of removal of roughly 16 feet of fencing and almost all barbed wire. Vegetative and other debris has accumulated in this vicinity outside the actual basin fencing. Older holes in the chain link fence were observed, but some homeowners had installed their own privacy fencing so no access either way was possible.

Within the fenced area, the basin is surrounded by a roughly 6-foot level area used as a maintenance pathway, and an unpaved vehicle ramp leading down to the bottom from near the access gate. The ramp-way and a good percentage of the maintenance pathway are overgrown, still functional and serve the purpose of deterring trespassers. No accumulation of beer cans or other evidence of youth congregations was observed within the basin.

On the inside of the maintenance path, the slope of the basin is roughly 45 degrees extending downward to the bottom. The slopes are almost completely covered with vegetation including numerous Norway Maples, poison ivy in areas, multiflora rose, and some pines. The bottom is fully ponded, but little access is possible due to the overgrowth. A few plastic containers were observed, but no significant accumulations. This is a closed basin, and plastics that flow in or enter do not have an exit route. The water appeared clear and there was a bit of duckweed along the edges. I was not able to estimate the depth, but could not observe the location of the inlet pipe or pipes leading to the basin. The vegetation along the basin slope did not exhibit evidence of inundation or erosion (slope failure) if the area water level increased significantly due to a storm event. Two mallard ducks were observed swimming in the water during my recon, and I noted the presence of a few dragon flies. I did not use insect repellent during my walk, but did not observe any mosquito bites.

A brief review was also made of available Google Earth images for this site. The basin appears to have been a "dry" basin from the earliest images (1994) through 2009. Subsequent to that it appears to be ponded. It appears that vegetative overgrowth in the bottom was removed. A 2007 and 2010 image are included below.

Some maintenance is suggested and it would be appropriate to review the design capacity to confirm the maximum amount of water the basin can mitigate without impacting the nearby residents. I observed that 2 small saplings were recently planted (and staked) along the Arthur Ave setback. Presumably these were by a local homeowner as an effort to add more tree cover and variety to the area. That is a sign that some residents have an interest in their local area environment. I have no objection to that, and hope they thrive.

The following photos are provided simply to document some of my observations. Should you have any questions, please do not hesitate to contact me.



Historical marker on Stewart Ave by Arthur Street, Bethpage. Former LI Motor Parkway



Adjacent to NCDPW Basin 495. Stewart Ave, Electrical Transmission tower & lines, Bethpage



Identification sign posted by main access gate, NC Storm Basin #495, Bethpage



View of main vehicle access gate, Arthur Street NCDPW Basin #495, Bethpage



Detail of inter-locked keys on chain at access gate, Basin 495, Bethpage



View facing east along Arthur Street by NCDPW Basin 495, Bethpage



View of Monitoring Well opposite 75 Arthur Avenue, Bethpage



Vandalized fence, northeast side of Basin 495 near Broadway, Bethpage Note tree stump used as stepping platform



View of missing fence chain and barbed wire, Southeast side Basin 495 near N Millpage Dr properties, Bethpage, NY. Note accumulated debris.



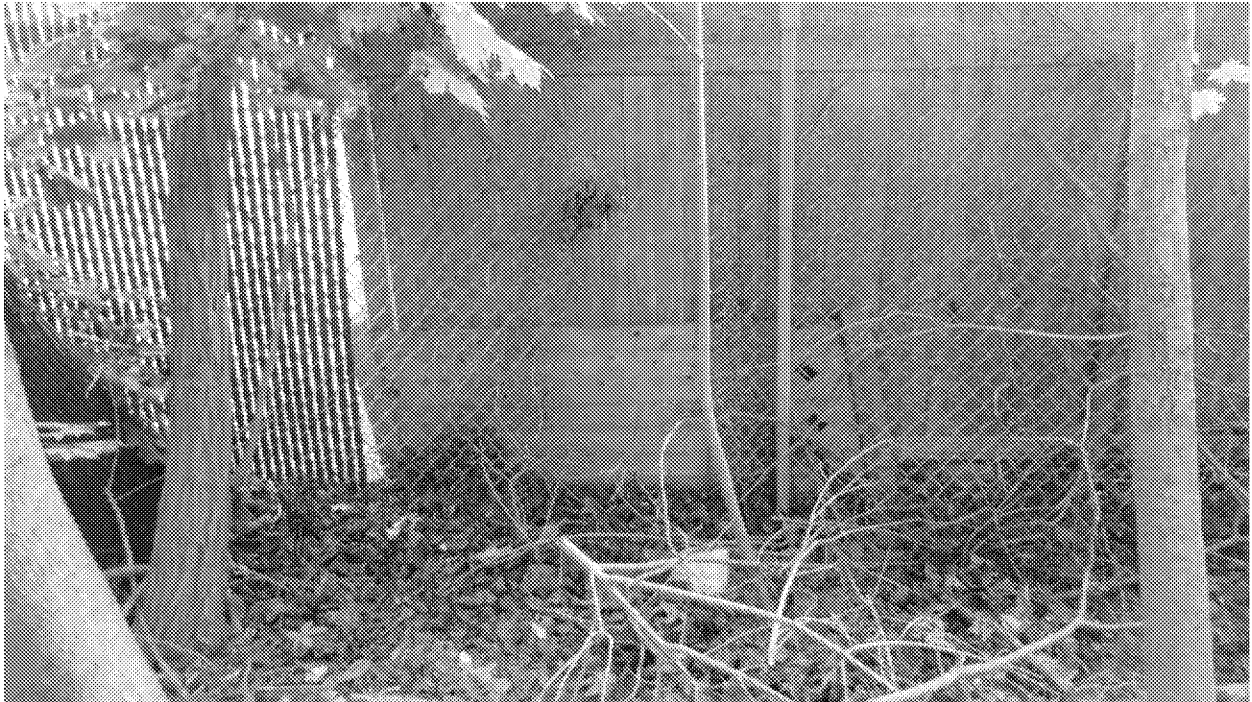
View of apparently recent cut of chain link fence, east side near southern border and Stewart Ave, Basin 495



View looking east from edge of ponded area, note transmission tower & lines, Basin 495, Bethpage



View looking northeast of ponded are from edge on West side. Note limited debris observed. Basin 495, Bethpage



View of south side of Basin 495 adjacent to property owner along N Millpage Dr., Bethpage  
Note new private fencing and older gap in County fence.



View of Monitoring well, near Arthur Ave and Broadway, Bethpage. Bollards protecting vault to transmission electrical facility in background.



View of slope and bottom of basin from South maintenance path Basin 495, Bethpage



View of vehicle access ramp from basin bottom towards access gate, Basin 495, Bethpage



View facing West along access pathway, south side Basin 495, Bethpage



View facing northeast towards Arthur Avenue, post bent along north border, Basin 495, Bethpage.



Basin 495 Google Earth photo Sept 2010



Basin 495, Bethpage Google Earth photo July 2007